

Ghee (Clarified Butter): The Ageold Super Wellness Food

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ARTICLE ID: 26

Introduction

Ghee or clarified butter oil is a very popular traditional dairy product in India used since Vedic times for religious rites, cooking, cosmetic and medicinal purposes. The importance of ghee in Indian diets has been recognized from primitive years for its nutritive value, pleasant aroma and textural properties. It is made from butter, cream or milk of numerous animal species.

Ghee is viewed as an energy-rich food with essential fatty acids like linolenic acid and arachidonic acid, fat-soluble vitamins and growth promoting nutrients. It mainly consists of fatty acids that are saturated, monosaturated, polysaturated, trans fats and omega fatty acids along with cholesterol, and very little amount of water. It contains essential fatty acids and fat-soluble vitamins that are not synthesized in the body. The milk fat components like CLA, sphingomyelin, butyric acid and other lipids possess anti-carcinogenic properties are present in ghee. It contains antioxidants like Vitamin E and β -carotene with other nutrients like phospholipids, diglycerides and triglycerides.

Ghee is nutritionally more reliable to other oils/fats due to the presence of its medium chain fatty acids that can be absorbed directly by the liver and burned to supply energy. It has fairly shelf stable due to low moisture and natural antioxidants contents.

Lactose or casein intolerant persons have no difficulty with ghee consumption because of removal of milk solids and impurities during clarification process. Various scientific findings recommend that the characteristic flavour of ghee and a mixture of bio-functional compounds make it appropriate for consumption by individuals of all ages with many health benefits.

Use of ghee in ayurveda

Ghee is extensively used in ayurveda for several medical applications including therapy of hypersensitive reaction skin and respiratory diseases. The consumption of ghee imparts various health benefits as it binds toxins, enhances complexion and glow of the face and body, greatly rejuvenates eyes, increases physical and intellectual stamina in addition to imparting sustaining energy. The anti-oxidant properties of ghee help to forestall neurological diseases, increase HDL levels and reduce LDL level in the blood. CLA isomers are considered to be anti-obesity, antiatherogenic, anticarcinogenic and antidiabetic components. Butyric acid is an ordinary modulator of gene function. It acts as anticarcinogen by regulating cell growth and inducing cell differentiation in a wide variety of neoplastic cell lines.

Preparation of ghee at home

Delicious and healthy ghee can be prepared using full fat containing milk that can be collected on the top or heavy cream containing milk. Prepare curd using this milk adding around 1 tablespoon of starter curd available at home. Leave it at room temperature for around 7 to 8 hours and then refrigerate the formed curd for 5 to 6 hours. To this cold curd, add cold water, churn in a blender till butter separates leaving buttermilk behind. The buttermilk can be used as desired. Remove the butter from buttermilk and wash it well with water twice or thrice to remove traces of buttermilk. This butter can be heated with occasional stirring. The liquid portion will gradually evaporate and milk solids will settle at the bottom of the pan. The remaining golden yellow liquid is ghee. Once it cools to room temperature, it is strained to remove the milk solids and stored in a clean and dry container till use.



Nutritional composition of ghee

The nutritive analysis of the ghee showed the moisture, crude protein, crude fibre, ether extract, nitrogen free extract and total ash contents of ghee residue as 12.10, 19.86, 3.49, 47.12, 25.63 and 3.90 % respectively. The fatty acid profile of ghee residue contained palmitic acid as highest 38.88 % among saturated fatty acids and the oleic acid as highest of 25.15 % among unsaturated fatty acids. Linoleic, linolenic, eicosapentaenoic and docosahexaenoic acid content of ghee residue were 2.02, 0.79, 0.36 and 0.25 % respectively. The amino acid profile of ghee residue revealed that the lysine, methionine, threonine and arginine levels content were 0.99, 0.61, 1.44 and 0.76 % respectively. Current studies published that ghee residue additionally incorporates natural carbonyls, lactones, and FFAs apart from its nutritional and antioxidant properties.

Milk fat is richest natural source of CLA which comprises of an average 450 mg CLA/ 100 g of fat. CLA is considered as an integral biologically active component of food due to its anticarcinogenic, antiallergic and anti-inflammatory properties.

Benefits of ghee

In spite of its numerous health benefits, over the past few years, ghee has obtained unwanted publicity due to its high cholesterol and saturated fatty acid contents. The excess consumption may be detrimental to human health effects and hence the American coronary heart affiliation recommends limited consumption due to its saturated fats and cholesterol which can be a threat to occur of cardiovascular diseases.

- **Ghee has wound healing properties:** The skin and tissue regeneration capacity in wound healing were determined by collagen estimation, wound contraction and breaking strength of the skin. The presence of hydroxyproline or collagen content in ghee makes it a good anti-aging agent and is particularly good for skin health.
- **Ghee control incessant cough:** Cough comes with winter and to treat it quickly, ghee has been used for many years effectively. A teaspoon of warm ghee can be consumed directly or mixed with ginger powder and consumed.
- **Ghee improves eyesight:** As per ayurveda, ghee can improve your eyesight and protect eyes from many eye-related diseases and improve better vision when consumed in limited quantities.

- Ghee helps digestive system:Ghee consumption is strongly related to a healthy gut. In the olden times, our ancestors used to have a spoonful of ghee before every meal as it lined the gut and reduced chances of ulcers and cancer.
- **Ghee relieves constipation:** Persons with constipation can take one tablespoon of ghee at night before bed to aid in digestion by healing the digestive tract that in turn relieves constipation under doctor advice.
- **Ghee boosts immune system and helps weight loss:** Ghee is loaded with antioxidants which boost the immune system by increasing the body's ability to absorb essential nutrients. The efficient absorption of nutrients by the body effectively reduces the chance of falling ill as body is provided with all required nutrients.
- **Ghee provides healthy fats:** Ghee is an excellent source of good fats that improve heart health and is beneficial for weight loss. It helps in removing toxins from the cells thereby improving metabolism and improved metabolism helps to lose weight easily.
- **Ghee strengthens bones:** Ghee is rich in vitamin K which helps in calcium absorption which in turn helps in the prevention of tooth decay and atherosclerosis to a certain extent.
- **Ghee cures thyroid dysfunction:** The use of ghee can help in balancing the hormones and can be instrumental in preventing thyroid dysfunction.
- **Ghee has high smoke point:** Ghee does not break into free radicals at a high temperature and free radicals are responsible for cancers amongst other life style diseases. Hence the use of ghee makes it an ideal medium, a stable fat to cook and fry food in it.
- **Ghee treats menstrual problems:** Ghee tends to balance the hormones in the body and hence makes it an ideal contender for relieving menstrual problems like premenstrual syndrome (PMS) that includes mood swings, tender breasts, food cravings, fatigue, irritability and depressions well as irregular periods.
- **Ghee is an appetizer:** Ghee consumption increases appetite in kids and adults alike. This is another reason to add it to children's food when they first start weaning.

- **Ghee enhances taste:** Ghee elevates the taste of any dish that when added to a bowl of dal becomes tastier after addition of ghee.
- **Ghee is a positive food:** Ghee attracts toxic elements in the body and helps in cleansing the body of harmful stuff. It is one of the most sattvic foods.

Conclusion

Ghee has been considered superior to other fats due to the fact of the presence of characteristic short chain fatty acids, contains the fat-soluble vitamins A, D, E, K and essential fatty acids like linolenic acid and arachidonic acid. It is considered as a healthy fat due to its anticancer, antistress, eye lubricant activities, hepatoprotective, cardioprotective and wound healing properties. Ayurveda suggests different treatment procedures for diverse ailments using medicated ghee manufactured with different herbal extracts. Currently, ghee is recommended as a healthy food by fitness studios, yoga centres and health stores.